

AMENDMENTS TO THE CLAIMS:

The listing of claims provided herein shall replace all prior versions and listings of the pending claims:

Listing of Claims:

Claims 1-⁴20 (canceled)

21. (currently amended) A motor vehicle electrical power system for powering an electrical load external to the vehicle, comprising:

an internal combustion engine;

a battery;

an electric generator coupled to said internal combustion engine for generating AC electrical power when said internal combustion engine is running;

a generator inverter disposed between said electric generator and said battery for converting the AC electrical power generated by said electric generator to DC electrical power for storage in said battery;

an electric traction motor coupled to said battery;

a traction inverter coupled to said battery for converting the stored DC electrical power to an AC power input for said electric traction motor;

a switching device disposed between said traction inverter and said electric traction motor for selectively diverting the AC electrical power input ~~from said electric traction motor~~ for application to the external electrical load; and

control means for prohibiting movement of the vehicle when powering the external electrical load.

22. (previously presented) The system according to claim 21, wherein said switching device comprises a contactor.

23. (previously presented) The system according to claim 21, further comprising:

a filter coupled to said switching device for minimizing noise in the diverted AC power input; and

a transformer coupled between said filter and the external electrical load.

24. (previously presented) The system according to claim 21, further comprising:

a DC-to-DC converter coupled between said first electric machine and said first inverter for generating lower voltage DC electrical power from the DC electrical power produced by said first inverter;

an inverter coupled to said DC-to-DC inverter for converting the lower voltage DC electrical power to an AC power output for application to the external electrical load.

²⁵
~~26~~. (previously presented) The system according to claim 24, further comprising a second filter for minimizing noise in the AC power output.

²⁶
~~27~~. (previously presented) The system according to claim 24, wherein:

said DC-to-DC converter is a two-way DC-to-DC converter;

said inverter comprises a rectifier, and

said system is operable in a charger mode..

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~~28~~. (previously presented) The system according to claim 26, further comprising means for selecting operation of said system in a generator mode versus the charger mode.

²⁸
~~29~~. (currently amended) A motor vehicle electrical power generating system for powering an electrical load external to the vehicle, comprising:

an internal combustion engine;

a battery;

an electric generator coupled to said internal combustion engine for generating AC electrical power when said internal combustion engine is running;

a generator inverter disposed between said electric generator and said battery for converting the AC electrical power generated by said electric generator to DC electrical power;

a DC-to-DC converter coupled between said electric generator and said generator inverter for generating lower voltage DC electrical power from the DC electrical power produced by said generator inverter; and

an inverter coupled to said DC-to-DC ~~inverter~~ converter for converting the lower voltage DC electrical power to an AC power output to power the external electrical load; and

control means for prohibiting movement of the vehicle when powering the external electrical load.

28 ²⁹/₃₀. (previously presented) The system according to claim 28, further comprising a second filter for minimizing noise in the AC power output.

28 ³⁰/₃₁. (previously presented) The system according to claim 28, wherein:

said DC-to-DC converter is a two-way DC-to-DC converter;

said inverter comprises a rectifier; and

said system is operable in a charger mode.

31 ³²/₃₀. (previously presented) The system according to claim 31, further comprising means for selecting operation of said system in a generator mode versus the charger mode.

³²/~~33~~. (new) The system according to claim 21, wherein said control means inhibits operation of said system based one or more of a gear selector position, door open/shut condition and parking brake condition.

³³/~~34~~. (new) The system according to claim ²²/~~29~~, wherein said control means inhibits operation of said system based one or more of a gear selector position, door open/shut condition and parking brake condition.

³⁴/~~35~~. (new) A method for operating a hybrid electric vehicle having a battery, inverter and at least one electric motor, the method comprising:

applying DC electrical power stored in the battery to the inverter to generate AC electrical power for the motor;

diverting the AC electrical power to an external load so as to operate the vehicle in a generator mode; and

prohibiting movement of the vehicle when operating the vehicle in the generator mode.

³⁵/~~36~~. (new) The method according to claim ²⁴/~~25~~, further comprising the step of inhibiting generator mode operation based on a gear selector position of the vehicle.

³⁶/~~37~~. (new) The method according to claim ³⁴/~~35~~, further comprising the step of inhibiting generator mode operation based on a door open/shut condition of the vehicle.

³⁷/~~38~~. (new) The method according to claim ³⁴/~~35~~, further comprising the step of inhibiting generator mode operation based on a parking brake condition of the vehicle.

³⁸/~~39~~. (new) A method for operating a hybrid electric vehicle having a battery, DC-to-DC converter, at least one

electric generator coupled to an internal combustion engine,
and a generator inverter the method comprising:

operating the internal combustion engine to generate AC
electrical power from the generator;

applying the generated AC electrical power to the
generator inverter in order to generate DC electrical power;

applying the DC electrical power to the DC-to-DC
converter to generate a lower voltage DC electrical power;

inverting the lower voltage DC electrical power to a
generate an AC power output for an external load, thereby
operating the vehicle in a generator mode; and

prohibiting movement of the vehicle when operating the
vehicle in the generator mode.

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rst ³⁹/₄₀. (new) The method according to claim ³⁸/₃₉, further
comprising the step of inhibiting generator mode operation
based on a gear selector position of the vehicle.

R. 1/26 *rst* ⁴⁰/₄₁. (new) The method according to claim ³⁸/₃₉, further
comprising the step of inhibiting generator mode operation
based on a door open/shut condition of the vehicle.

rst ⁴¹/₄₂. (new) The method according to claim ³⁸/₃₉, further
comprising the step of inhibiting generator mode operation
based on a parking brake condition of the vehicle.

rst ⁴²/₄₃. The method according to claim ³⁸/₃₉, wherein the DC-
to-DC converter is bidirectional and wherein the method
further comprises the step of operating the vehicle in a
charging mode.